THE EFFECT OF PROJECT START ON READING ACHIEVEMENT AND ATTENDANCE OF AT-RISK FOURTH-GRADE STUDENTS

By

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The purpose of this study was to determine the effect of a self-contained dropout prevention program on reading achievement and attendance of elementary students. The study was designed to compare reading scores and attendance of fourth-grade students who participated in a self-contained dropout prevention program with reading scores and attendance of fourth-grade students in the traditional school program. Students in this study were identified by a standardized test reading score of stanine 4 or below.

The sample for this study was drawn from all the fourth-grade classes in schools that had implemented Project START (Success Through Alternative Rewards and Trust) in a Florida school district. There were 3,024 fourth-grade students in the district. One hundred eighty-seven students were in the sample. This sample represented 7% of the total fourth-grade population and 33% of the fourth-grade students who participated in Project START.

A one-way analysis of covariance was performed to determine if there was a significant difference in the CTBS (Comprehensive Test of Basic Skills) test scores in reading achievement between fourth-grade students who participated in Project START and fourth-grade students who participated in the traditional school program. A second one-way analysis of covariance was performed to determine if a significant difference existed in attendance between fourth-grade students who participated in Project START and fourth-grade students who participated in the traditional school program. Test scores and attendance were used as covariates.

Analysis of the data indicated that participation in Project START was not associated with improvement in reading achievement or attendance. Conversely, students in the control group made significantly greater gains in reading achievement and attendance than the students who participated in Project START.

The research indicated that successful dropout prevention programs improved reading achievement scores and attendance. Posttest reading achievement scores and attendance indicated that students served in Project START were not making the same gains as similar students served in regular classes. Although the results of this study do not support the research on successful dropout prevention

programs, these results will be useful in district program evaluation and development.

CHAPTER 1
INTRODUCTION

Background

The school dropout problem is an extremely complex and costly socioeconomic issue in the state of Florida. Based on the 1990 Census of Population, Florida, with a dropout rate among 16- to 19-year-old students of 14.3%, ranked 49th in the United States in keeping students in school (Children's Defense Fund, 1992). The Florida Center for Children and Youth (1993) reported that during the 1990-92 school year approximately 78.6% of Florida's high school students graduated within 4 years of high school enrollment. The center predicted that fewer than 72% of Florida's students who started the ninth grade in 1992 would finish high school in 4 years. Almost 7% of the students enrolled would drop out of school before the end of the year (Wiginton, 1993). The dropout problem is particularly acute in Florida because of an exploding population rate, stringent graduation requirements, poverty, and transience. In order to break the cycle of economic and educational disadvantage and to address the needs of its increasing dropout population, the Florida Legislature passed the Dropout Prevention Act of 1986 (Florida Department of Education, 1992b).

The Florida Legislature recognized that a growing proportion of young people were not making successful transitions to productive adult lives. They further recognized that traditional education programs did not meet certain students' educational needs and interests and contributed to these students becoming unmotivated, failing courses and grades, being truant, being disruptive, or dropping out of school. The Legislature authorized and encouraged district school boards and educational leaders throughout the state of Florida to establish comprehensive dropout prevention programs. The common objectives of the dropout programs developed by Florida county school systems were increasing attendance, improving academic performance, increasing the number of students who remain in school or graduate, providing parenting skills, improving the promotion rate, and reducing disciplinary problems and referrals. Several program categories including dropout retrieval, educational alternatives, teen parenting, substance abuse, disciplinary, and youth services had been identified by educational leaders (Florida Department of Education, 1992b).

The school districts responded to the Legislature and served over 98,244 students in 66 school districts' dropout prevention programs in 1990-91. Only one school district did not operate any dropout prevention programs during this school year. Students served in dropout prevention programs represented 8% of the students enrolled in the overall 4th- to 12th-grade general population (A. Manning, personal communication, March 26, 1992). Students participating in dropout prevention programs generated a weighted cost factor of 1.731 through the Florida Education Finance Program in 1990-91. A total of 61,741 full-time equivalent memberships (FTEs) were projected for 1990-91 dropout prevention programs. This equated to approximately $278,811,211 projected for dropout prevention programs in 1990-91 (Florida Department of Education, 1991b).

In 1992-93, 177,288 students in 66 districts were served in dropout prevention programs. Students participating in dropout prevention programs represented about 14% of the overall general population of 4th to 12th grades. A total of 75,260 FTEs were projected for the 1992-93 dropout prevention programs. This equated to approximately $321,832,080.20 allocated for dropout prevention programs in 1992-93 (Florida Department of Education, 1994).

Within the state of Florida, educational alternative programs were designed to serve students who were disinterested, unmotivated, and unsuccessful as demonstrated by failing grades, grades not commensurate with ability, high absenteeism, low test scores, grade retention, over-age for grade, or identified by student services personnel as a potential dropout (Florida Department of Education, 1991a). Alternative programs offered served a relatively homogeneous population and focused on academics and counseling (Foley &

Warren, 1985). Alternative education programs addressed the causes of dropping out prior to graduation which were divided into student factors, school factors, and societal factors (Hendrick, MacMillan, & Balow, 1989).

Researchers associated many reasons for being at risk of dropping out of school. Among those reasons included dysfunctional or unstable family life, substance abuse, emotional problems, alienation from school, parental problems, frustration, and child abuse (Bull, Montgomery, & McIntosh, 1993). One study found that the characteristics of the neighborhood were associated with dropping out of school (Clark, 1992). There were a myriad of reasons associated with dropping out of school, many of which were symptoms of other factors.

Educational leaders found that academic performance was the predominant student factor and best predictor of who was at risk of dropping out of school (Schultz, Toles, & Rice, 1986). This finding was confirmed by Barber and McClellan (1987) and Helge (1990), who stated that academic problems caused students to drop out. Students who eventually dropped out began having problems from almost the beginning of their school careers. Serious academic problems appeared as early as the third grade. Poor academic performance, primarily in the lower grades, was the most common reason students left school. Students who performed at one or more years below grade level or had failed one or more grades were most likely to drop out (Mann, 1986). As early as 1964, Bloom reported that schooling was a cumulative phenomenon, and high school programs might not counterbalance longstanding academic problems. Programs that targeted students of high school age were often too late to affect the students' school plans because patterns of academic behavior in the elementary grades were good predictors of high school performance (Bloom, 1964). Educational leaders concluded that a key to effective dropout prevention programs was the early identification of potential dropouts so that services such as educational alternative programs could be provided to at-risk students prior to high school (Pallas, 1986). Friedel and Boers (1989) reported that there was a need for early intervention in the lower grades to avoid secondary school dropout.

The most important areas of academic achievement identified by educational leaders and researchers were reading and math. Yet, Florida schools were the least effective in addressing these subject areas (Governor's Commission on the Reform of Education, 1990). Most at-risk secondary students had major deficiencies in reading (Friedel & Boers, 1989). Students with low reading scores were likely to be over-age and were most likely to drop out (Hess & Greer, 1987). In a study conducted by Schulz, Toles, and Rice (1986), reading achievement accounted for most of the variation in predicting students' dropout rates. The record clearly indicated that thousands of Florida's students entered high school unable to read or reading below grade level. It was equally true that many students who dropped out of high school made that decision because of problems, particularly in reading, that originated in elementary school (Governor's Commission on the Reform of Education, 1990). Slavin, Karweit, and Wasik (1993) indicated that elementary students who had failed one or more grades and were reading below grade level were highly unlikely to finish high school. In response to the Dropout Prevention Act of 1986 and a growing body of research supporting the concepts of the statute, Florida's educational leaders established self-contained, educational alternative programs that emphasized reading achievement. These programs would address the dropout problem at its earliest stages at the elementary level.

The Dropout Prevention Act of 1986 required that each school district receiving state funding for dropout prevention programs through the Florida Education Finance Program (FEFP) submit a biennial report to the Department of Education, which in turn compiled the information and submitted it to the presiding officers of the Legislature every 2 years. Districts transmitted dropout prevention program data to the Department of Education through the Florida Department of Education Information Data Base. Demographic, process, and outcome data on dropout prevention programs throughout the state of Florida were transmitted through this data base. Demographic data included race, gender, school site, and so forth. Evaluative data collected through this system included promotion, retention, attendance, accomplishment of objectives, disciplinary actions, dropout rate, and habitual truant rate (Fleming & Richardson, 1992). Additionally, staff development narrative information was provided by the districts for the biennial evaluation.

As a part of the Comprehensive Dropout Prevention Plan required by the Dropout Prevention Act of 1986, districts developed outcome objectives that were evaluated annually and included minimum objective criteria for each program category. All objectives must have been measurable, stated the outcome, stated the degree of the outcome to be achieved, and indicated a timeline (s230.2316(5)(d),F.S.) (State of Florida, 1991).

Although reading achievement had been identified as one of the strongest predictors of dropping out (Hess & Greer, 1987; Slavin et al., 1993), the state had not collected or analyzed data relative to the reading achievement gains made by identified at-risk students who were participating in state-approved dropout prevention programs.

Problem Statement

To meet the overwhelming needs of a growing "at-risk" student population, a variety of programs had been initiated and established at the secondary school level in Florida. However, it was recognized both at the national and state levels that intervention strategies must begin at an earlier age and at a lower grade level. Therefore, the state of Florida, through the Florida Department of Education and the Dropout Prevention Act of 1986, encouraged each county to develop dropout prevention programs for students in grades 4 and 5 who met eligibility criteria which targeted them as "at risk." Although the state provided general guidelines for the counties to use, each county developed programs that specifically met the needs of the at-risk student population. The problem was to devise an elementary program that successfully addressed the needs of potential high school dropouts.

One central Florida school district responded to the Florida statute that encouraged the creation of dropout prevention programs by developing Project START (Success Through Alternative Rewards and Trust). This researcher served on the district team that developed the comprehensive dropout prevention plan and was an integral part in the development of Project START. One objective of Project START was to strengthen academic performance, particularly in the area of reading achievement. Improved attendance and promotion to the next grade level were also student objectives.

Although reading achievement had been identified as a prime indicator of school success and completion (Slavin et al., 1993), this central Florida school district had not assessed the effect of Project START on reading achievement. Nor had this central Florida school district determined the impact of Project START on attendance. These data were not available through the Department of Education student data base by program category by school. This researcher recognized that there were many factors related to the reasons students leave school. Reading achievement and attendance may have been only symptoms of the many other problems that the students experienced. However, the focus of this study was on reading achievement and attendance because these two symptoms can be measured quantitatively. This research was an examination of these two variables as they related to program participants in Project START. Additionally, two variables were examined as they related to students who were eligible for the program but were not served. Students not served in Project START received their instruction in the regular school program.

Purpose of the Study

The purpose of this study was to determine the effect of a self-contained dropout prevention program on reading achievement and attendance of selected elementary students.

The following questions guided the conduct of this research.

1. Was there a significant difference in standardized reading achievement scores between identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for reading achievement scores from the previous year?

2. Was there a significant difference in attendance of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for attendance from the previous year?

Assumptions

1. It was assumed that all non-Project START teachers were following district policy using the district adopted basal reader.

2. It was assumed that both Project START and traditional classroom teachers shared the same level of commitment toward their students.

3. It was assumed that all teachers participating in the START program followed the curricular and behavioral objectives stated in the program's guidelines.

Delimitations

1. The research took place in one middle-sized central Florida school district.

2. The research was confined to potential school dropouts in one grade level, fourth grade.

3. The research was confined to reading achievement based on the CTBS/4 scores and attendance from 1991 and 1992.

4. Teachers in the traditional fourth-grade classrooms were required to use the district-adopted basal reader.

Limitations

1. Participating teachers were of varying ability and experience.

2. There was no way to control for teacher implementation of curriculum.

3. Uniform administration of the CTBS/4 could not be guaranteed.

4. The optimum physical and emotional well-being of each student during the test-taking period could not be guaranteed.

5. Home factors affecting attendance patterns of participating students were varied.

The Program Description

Project START, developed in 1987 by educational leaders in a central Florida school district, operated in self-contained classrooms within selected elementary schools throughout a central Florida school district. This researcher participated in the original development of the district comprehensive dropout prevention plan and Project START. This development included the delivery model, specific eligibility criteria, length of stay, and curriculum.

Prior to the development and implementation of Project START, there were no special programs to serve elementary students identified at-risk of dropping out of school other than Chapter I and Exceptional Student Education. In 1986, school-level administrators were given the opportunity to project weighted dropout prevention FTE for a Project START class in their schools for the 1987 school year. School participation was entirely voluntary.

Project START served eligible fourth- and fifth-grade students, some of whom remained with the same teacher for 2 years to provide stability, emotional support, and consistent reinforcement in academic progression. The program offered the regular fourth-grade curriculum with an emphasis on reading skills. Special strategies included computer-assisted instruction, special interest presentations, hands-on activities, small and large group instruction, cooperative groups, field trips, guidance activities, and close coordination with parents, student services, and outside agencies. The teacher/student ratio for Project START was 1:15, which was lower than the traditional program ratio of 1:28. Part of the weighted FTE was used to lower class size in Project START classes.

Students were eligible to participate in Project START if they met two or more of the following criteria: 16 or more absences in the previous school year; 1 or more years older than the grade level average; stanines of 4 or below on standardized, norm-referenced tests; attendance in three or more schools during 1 school year; three or more Ds or Fs from the previous school year; at least 1 year of required summer school attendance within the last 5 years.

Students were recommended to participate in Project START by teachers, guidance counselors, parents, and administrators. Student records were examined to document eligibility by a team of educators that included the principal, the guidance counselor, and the START teacher. Eligible students were then referred to the student success team.

The student success team was a school-based team consisting of a building-level administrator, a social worker, a school psychologist, the elementary resource teacher, and the classroom teacher. That team reviewed students who had been referred to them because of academic, social, emotional, or physical problems. That team recommended strategies to correct the individual student problem and closely monitored progress throughout the year. If the recommended strategies were not successful, students were then recommended for additional testing and evaluation.

As a part of the admission procedures for Project START, the student success team determined if participation in

Project START would be educationally appropriate for each individual student. Preference was given to those students with the greatest need and who could benefit from the services since class size was limited to 15 students. Student participation in the program was voluntary and parents had to approve their child's participation in the program.

Teachers selected for the program were required to hold a valid Florida teacher certificate. They also were selected based on a desire to serve at-risk students, a wide variety of teaching experiences, and the ability to motivate and direct the students academically, socially, and emotionally.

This study was developed to determine if Project START significantly affected student reading achievement scores on the standardized norm-referenced CTBS test and attendance of at-risk students. The reading achievement scores and attendance of identified at-risk fourth-grade students who met the eligibility criterion of a stanine of 4 or below on a standardized, norm-referenced test but who were not participants in Project START were compared with identified at-risk fourth-grade students who met the eligibility criterion of a stanine of 4 or below on a standardized, norm-referenced test and received the treatment, Project START. Reading achievement scores and attendance from the previous year were covaried to control for initial differences between the two groups, therefore making the two groups more balanced.

Operational Definition of Terms

The following definitions were used in this study.

At risk was a term which applied to those youths who had characteristics that placed them in danger of dropping out of school.

Attendance was the number of days present.

The Comprehensive Test of Basic Skills, Fourth Edition (CTBS/4) was a test series designed to measure achievement in the basic skills commonly taught in schools throughout the nation. The subject areas measured were reading, language, spelling, mathematics, study skills, science, and social studies. Items for CTBS/4 were organized by content categories that reflected the educational objectives commonly found in state and district curriculum guides, published textbooks and basal series, instructional programs, and criterion-referenced assessment tests (CTB/McGraw-Hill, 1989).

Connections, by Macmillan Publishing Company, was the district-adopted basal reader for all regular elementary school classrooms in the district identified in this study. This basal reader emphasized a skill-and-drill approach (Arnold & Smith, 1990).

Compensatory rivalry was common knowledge among the subjects of an experiment that one of the treatment groups was expected to perform better. The result was a competitive environment in which the underdog tried not to be beaten. In a competitive environment, the rivalry could have influenced the results more than the treatment, therefore, threatening the internal validity (Mason & Bramble, 1989).

A _dropout_ was a student who left school for any reason except death before graduation or completion of a program of studies and without transferring to another public or nonpublic school or other educational institutions (State of Florida, 1991).

Educational alternative programs were programs designed to serve students who were disinterested, unmotivated, and unsuccessful as demonstrated by failing grades, grades not commensurate with ability, high absenteeism, low test scores, grade retention, and over-age for grade (Florida Department of Education, 1991a).

Express, by Macmillan Publishing Company, was a high interest/low readability level reading textbook which emphasized a whole-language, thematic approach (Arnold & Smith, 1989).

A _graduation rate_ was computed by dividing the number of first time ninth graders by the number who received a standard diploma or a certificate of completion 4 years later. A graduation rate differed from a dropout rate in that a graduation rate was computed based on 4 years versus a dropout rate that was computed annually (State of Florida, 1991).

A norm-referenced test produced a score that told how the individual's performance compared with other individuals. When it was necessary to obtain information about achievement relative to other students, a norm-referenced test was appropriate (Borg & Gall, 1989).

Over-age for grade meant 1 or more years older than the grade level average (School Board of Volusia County, 1991).

Project START was a self-contained, educational alternatives program developed by a central Florida school district, which served potential dropouts in grades 4 and 5 (School Board of Volusia County, 1991).

A self-contained classroom was one in which the teacher instructed all the subjects, with the possible exception of such specializations as art, music, and physical education (Smith, Krouse, & Atkinson, 1961).

A student study team was a school-based team consisting of a building level administrator, a social worker, a school psychologist, the elementary resource teachers, and the classroom teacher. The team reviewed students who had been referred to them because of academic, social, emotional, or physical problems and recommended strategies to correct the individual student problem. The team monitored progress throughout the year and recommended the students for additional testing and evaluation if the strategies were not successful.

Background and Justification of the Study

Several reasons were apparent to justify the necessity for this study. The Center for Needs Assessment and Planning (1992) found that there was an increasing number of students in Florida for whom it was difficult to provide successful alternatives to the traditional classroom. Teachers continued to be frustrated with increasing class size and diversity of the student population. In 1990, Florida ranked fourth in the number of people moving into the state even though the acceleration rate of population growth in Florida had decreased since the 1970s (Hodgkinson, 1992).

In 1991, the Florida Legislature passed the Blueprint 2000 legislation that created the Florida Commission on Reform and Accountability. The commission developed a system to transfer the accountability and authority of the public education system from the state to the local level. This system, Blueprint 2000, was approved by the State Board of Education in October 1992. Based on quantitative student outcomes, recommendations were developed by the Commission. Testimony and many other resources were used to develop these recommendations. These recommendations were presented to the State Board of Education for implementation of the Blueprint 2000 legislation. Blueprint 2000 gave school districts and individual schools the authority and responsibility to design effective programs to prepare their students for an ever-changing world (Florida Commission on Education Reform and Accountability, 1992).

Two of the goals of Blueprint 2000 were local control of program development and student performance. Twenty-two standards were developed that defined Florida's seven state goals for education. Florida State Education Goal 3 addressed student performance: "Goal 3--Student Performance--Students successfully compete at the highest levels nationally and internationally and are prepared to make well reasoned, thoughtful, and healthy lifelong decisions" (Florida Commission on Education Reform and Accountability, 1992, p. 28). Standard 3.1 specifically addressed reading skills. "Florida students locate, comprehend, interpret, evaluate, maintain, and apply information, concepts, and ideas found in literature, the arts, symbols, recordings, video and other graphic displays, and computer files, in order to perform tasks and/or for enjoyment" (Florida Commission on Education Reform and Accountability, 1992, p. 28).

Project START was a prime example of school improvement and accountability since it was developed at the local level and focused on reading achievement (Florida Commission on Education Reform and Accountability, 1992).

Betty Castor, former Florida Commissioner of Education, congratulated the Florida Department of Education for working with school districts to target at-risk youths and to develop programs to keep students in school. Commissioner Castor identified educational alternative programs as an innovative education initiative which helped keep students in school. Commissioner Castor believed that it was more important than ever that all students stay in school not only for their personal achievement but also for the future of Florida's economic growth. Students had to be prepared for a competitive workplace (Florida Department of Education, 1992a). Project START was an educational alternatives program. Therefore, research on Project START would provide information in quantitative form that determined the effect of this program on reading achievement and attendance.

Failing to learn to read in the early grades posed severe problems for the students. Reading achievement was one of the main reasons why students dropped out of school (Slavin et al., 1993). Slavin et al. (1993) indicated that elementary students who had failed one or more grades and were reading below grade level were highly unlikely to finish high school. It was difficult to remediate reading failure in later years because students who had not learned to read often became unmotivated. Slavin et al. (1993) said that reform was needed at all levels of education but no goal of reform was as important as seeing that all children started off their school careers with success, confidence, and a firm foundation of reading.

According to Slavin et al. (1993), success in the early grades did not guarantee success in later years, but failure in the early grades did virtually guarantee failure in the future. Lloyd (1978) found that students who were retained in elementary school were far more likely to drop out of school than nonretained students. This research would determine the effect of Project START on building a firm foundation of reading by improving reading achievement scores. This study would also determine the effect of Project START on attendance.

If Project START had a significant effect on reading achievement and attendance as reported by quantitative statistical data, then it could be used as a model for other districts. Additionally, the program developers and other educational leaders within the central Florida school district were eager to receive quantitative information on Project START. That information could be used to determine if the district's unique dropout prevention program supported the goals of Blueprint 2000, met the needs of the individual students, and addressed the problem of reading achievement as it related to potential student dropouts.

Summary of the Chapters

Chapter 1 is the introduction to the study. It includes the background, the problem statement, the purpose of the study, the research questions, assumptions, delimitations, limitations, the study, and the operational definition of terms.

Chapter 2 contains a review of the literature relative to the history of the dropout problem, the research on the dropout problem, and the application of dropout prevention programs.

Chapter 3 contains a description of the design of the study. The purpose is refined; the research questions are restated as null hypotheses; the population, the sample, and the testing instrument are discussed; and threats to validity are stated.

Chapter 4 contains the results of the statistical tests described in Chapter 3.

Chapter 5 contains a summary of the study. Conclusions, discussion, and implications are included which are based on the findings in Chapter 4.

CHAPTER 2
A REVIEW OF THE LITERATURE

This chapter contains a review of the literature relative to the history of the dropout problem, the research on the dropout problem, and the application of dropout prevention programs. Included are sections that reflect the background of the dropout problem in the United States, the reasons students drop out of school, the demographic information on race and sex of students who drop out of school, the need for early intervention, who Florida serves in dropout prevention programs and the dollars spent on the programs, and a review of selected dropout prevention programs.

Background of Dropout Problem in the United States

Throughout the history of the United States, the problem of students leaving school before receiving a high school diploma existed. A study by Ayres (1909) focused on early school leavers from the elementary grades. Only 10% of the population of the United States graduated from high school in the beginning of the 20th century. High school completion became the focus of attention in the 1930s, and the rise in the percentage of graduates increased steadily until the mid-1970s when the graduation rate rose to 75% (Hendrick, MacMillan, & Balow, 1989). If these statistics were considered without reference to social and economic issues, they could be considered encouraging. However, as the United States changed, socially and economically, from the industrial era to the information age, the ability to absorb the undereducated and undertrained into the work force became increasingly more difficult (Toffler, 1980). Also, the graduation rate began to increase again in the 1970s (Wehlage & Rutter, 1986). One researcher predicted that 25% of fifth-grade students would not graduate from any type of high school (Mann, 1986).

The problem of students who dropped out of school before graduation was compounded by the variations and contradictions in percentages when calculating the actual numbers who fell under this category. Therefore, it was important to note that a graduation rate differed from a dropout rate in that a graduation rate was computed based on 4 years versus a dropout rate which was computed annually. A graduation rate was computed by dividing the number of first-time ninth graders by the number who 4 years later received either a standard diploma or a certificate of completion. According to Section 228,141(29) of the Florida statutes (State of Florida, 1991), a dropout was a student who left school for any reason except death before graduation or completion of a program of studies and without transferring to another public school or other educational institution.

As the dropout rate increased, the high economic cost of dropping out before graduation, to both society and the individual involved, became increasingly more apparent. Dropouts earned less, paid fewer taxes, and collected more in social services (Hill, 1979). The estimated unemployment rate for dropouts shortly after they left school was more than twice that of high school graduates of the same age. Those who did not finish high school earned less money than high school graduates. The estimated lifetime earnings of high school graduates who did not attend college were approximately $200,000 higher than the earnings of those who did not complete high school (Pallas, 1986). A Canadian report found that each individual male dropout lost nearly $125,000 in 1992 over his working lifetime; the female dropout lost $107,000 (Lafleur, 1992). The projected costs of those who dropped out before completing high school were staggering. Levin (1972) estimated $71 billion of lost revenues and $3 billion in crime-related costs were dropout related. Catterall (1986) predicted that each dropout would cost the nation between $26,000 and $200,000 and that $20 billion to $200 billion would be lost for each school year class dependent on future earning power and loss projections.

Snyder (1984) predicted that, to help American society cope with the complexity of the dropout problem and to prepare society for a future of change, education would have to change, and, in order to serve society effectively, education would have to change before society did. Educational change would demand substantial financial backing. Yet, federal funding to education decreased by more than a quarter of the amount that was allocated in 1980 (Charles Stewart Mott Foundation, 1988). The 10th amendment to the constitution, however, implicitly left the responsibility for public education to individual states. State governments were the primary sources of funding for public education, providing over half of the financing (Charles Stewart Mott Foundation, 1988). It was to each of the state governments that concerned educational leaders turned for effective solutions to the dropout problem.

Characteristics of Students At Risk of Dropping Out of School

Researchers have associated many characteristics of being at risk of dropping out of school. Among those characteristics include dysfunctional or unstable family life, substance abuse, emotional problems, alienation from school, parental problems, frustration, and child abuse (Bull et al., 1993). One study found that the characteristics of the neighborhood were associated with dropping out of school (Clark, 1992). Slavin et al. (1993) indicated that elementary students who had failed one or more grades and were reading below grade level were highly unlikely to finish high school. Lehr and Harris (1994) identified academic difficulties, lack of structure, inattentiveness, low self-esteem, health problems, excessive absenteeism, fear of failure, and lack of motivation as possible traits of students at-risk of dropping out of school.

There were a myriad of reasons associated with being at risk of dropping out of school, many of which are symptoms of other factors. This study recognized that there are many factors related to the reasons students leave school. Reading achievement and attendance may have only been symptoms of the many other problems students experienced. However, this study focused on reading achievement and attendance because these two symptoms could be measured quantitatively.

Poor academic performance was identified as a prime reason why students dropped out of school before graduation. The data from standardized reading tests and student background information were correlated to determine relationships. A correlation was found among predicting dropping out, academic performance, and reading ability. Differences were discovered between students who remained in school and students who dropped out (Carney & Geis, 1981). Programs designed to support at-risk students and programs that effectively encourage academic excellence were found to be strikingly similar. The process through which at-risk students dropped out corresponded to the process through which students moved toward academic excellence (Cuellar & Cuellar, 1990). Editors of 30 research and development publications found that one of the most important factors in providing effective service to at-risk youths was to increase academic success (Office of Educational Research and Improvement, 1987). Research in the Chicago public schools indicated that reading achievement, age, and their interactions accounted for 80% of the variation in the dropout rate. The study focused on the association of the dropout rate with characteristics of these students. Reading achievement was of particular interest in this study because that could be improved or altered (Schulz, Toles, & Rice, 1986). In response to community concern and supporting evidence about an increasing dropout problem, a Rochester, New York, study found a major need was greater academic achievement, especially in reading (Urban League of Rochester, 1986). Pre-Teen Bridges, an alternative elementary program in Washington, DC, found academic support was a major component for positive programmatic impact on at-risk elementary students (James & Smith, 1989). Fordham University's Stay In School Partnership Project (SSPP), focused on preventive strategies supported by data. It addressed the school experience of at-risk children by tutors and play therapy. Family problem solving, counseling, and parent workshops were also integral components. Based on data collected, a profile was developed which indicated the importance of academic achievement (Baecher & others, 1989).

Stetler (1959) determined that students dropped out of school due to lack of interest, financial reasons, and poor academic performance. Sharp and Kristjanson (1965) found that the best predictors of youth aspirations were past academic performance and measured intelligence. The level of educational support provided at home and by peers also impacted academic achievement and ultimately the likelihood of dropping out of school (Arnold, 1985). Hammons and Olson (1988) concluded that a very strong negative relationship existed between changing schools and graduation. In addition, social influences and attitudes were found to be factors influencing students who dropped out of school. A study by the Dade County Public Schools found that the three main reasons for dropping out of school were lack of interest, family/personal problems, and failing grades (Romanik & Blazer, 1990).

Being behind in grade level and older than classmates was listed as the number one risk factor in a recent analysis. Students who were older than their peers were significantly at risk of dropping out of school (Mann, 1986).

Demographic Information on Students Who Drop Out of School

Socioeconomic status and race have been implicated as the two most important factors related to dropping out. Male students are particularly at risk (Willis & others, 1989). Findings of a Connecticut State Department of Education study (1990) indicated that males and minorities, especially Hispanics, are overrepresented in the dropout population. Trends over the past 4 years indicate that males and minorities continue to be overrepresented in the dropout population in Florida.

A 1987 report of Florida's schools indicated that whites and males represented the majority of students who dropped out of school from 1976 to 1982. In 1986-87, 32,578 students dropped out of Florida's K-12 public education system. Of this total, 38% were minorities; 52% were white; 57% were males; 43% percent were females (Florida Department of Education, 1987).

A Florida Department of Education report of program effectiveness for the 1987-88 school year looked at dropout percentages of racial populations in comparison to their representation in the total K-12 student population. Although white students represented 65% of the K-12 population, only 56% of the students who dropped out of school in 1987-88 were white. Black students dropped out in approximately the same proportion (25%) as in the K-12 population (24%). In 1987-88, Hispanic students dropped out of school at a higher rate (18%) than their representation in the general population (10%). Asian/Pacific and Indian students were represented in the dropout population and in the general K-12 population at the same level (1%) (Florida Department of Education, 1989a).

In the K-12 population in Florida in 1987-88, 51% were male and 49% were female. Approximately 57% of the students who dropped out of school in the same school year were male;

43% were female (Florida Department of Education, 1989a). In 1989-90, 33,304 students dropped out of Florida's public schools. Fifty-six percent (18,650) of the dropouts were male; 44% (14,654) were female; 54% (17,984) were white; 27% (8,992) were black; 17% (5,662) were Hispanic (Florida Department of Education, 1991a).

Approximately 23,000 students dropped out of Florida's schools in 1991-92. Fifty-nine percent (13,549) of the dropouts were male; 41% (9,415) were female; 49% (11,252) were white; 33% (7,578) were black (Florida Department of Education, 1992a).

The number of Florida's dropouts rose to almost 25,000 in 1992-93. Sixty percent (15,000) of the dropouts were male; 40% (10,000) were female; 39% (9,750) were black (Florida Department of Education, 1994).

Although there was an increase in the number of students who dropped out of Florida's school, Florida's dropout rate continues to improve due to the growth in student enrollment. In 1988-89, Florida's dropout rate was 7.54%. In 1991-92, Florida's dropout rate was 4,56% (L. Hutchenson, personal communication, September 14, 1993).

The Need for Early Intervention

Guthrie (1989) wrote that the single greatest issue facing American education today was solving the problem of improving the education of low achievers and other students at risk of school failure. He deplored the practice of placing academically deficient elementary students into special classes designed to eliminate these deficiencies. These classes usually were comprised of small groups with a resource teacher for about one-half hour per day. This one-half hour was the redistribution of instructional time and added nothing to the total amount of instructional time a low-achieving student received. Guthrie stated that at-risk students should be made a priority in each school, that the expectations of at-risk students should be raised, that more quality time for learning should be provided, and that intervention strategies should be initiated early in the child's schooling. Reitzammer (1990) promoted early intervention using dropout prevention programs which promote reading success while keeping students on grade level. An Austin Independent School District study of at-risk students in prekindergarten through sixth grade found that most students became potential dropouts while in the elementary school level (Frazer & Nichols, 1991). Slavin et al. (1993) identified the need for early intervention. Elementary students who had failed one or more grades and were reading below grade level were highly unlikely to finish high school.

McCormick (1989) stated that educational reform should focus on improving academic achievement, keeping at-risk students in school, and providing early intervention. Early interventions and educational expectations that promote access and quality education should be necessary parts of any dropout prevention program (Ochoa & others, 1987). Schools traditionally responded to poor academic performance with three standard organizational approaches, that is, grade retention, ability grouping and tracking, and special education. McPartland and Slavin (1990) analyzed these approaches and found that early intervention programs and experimentation with alternative programs needed to replace these approaches.

Slavin and Madden (1989) researched instructional practices that help at-risk students. Among programs that were successful were prevention programs at the elementary level and classroom change programs. Linder (1990) compared dropout prevention programs in six urban areas and concluded that dropout prevention programs should begin in the elementary years. This study was reaffirmed by the first national study of younger dropouts which showed that 6.8% of all 8th grade students left school before reaching the 10th grade. It confirmed what many in the dropout prevention field believed--that a substantial number become dropouts before high school (Linder, 1990). Another national study recommended high quality education programs from pre-kindergarten to grade 2, provision for alternative programs, and a challenging program to enhance achievement. A Wisconsin study of children at risk concluded that early intervention was necessary (Wisconsin State Department of

Public Instruction, 1990). Early intervention strategies provided students with skills and attitudes that make dropping out of school an unnecessary choice (Henry, 1986). Azumi and Gourgey (1985) found that dropouts usually show problems at a relatively early age. Thus, intervention efforts should be offered early, before students find it too difficult to catch up.

Peck (1987) indicated that dropout prevention programs were developed for students who were at risk of dropping out of school or have already dropped out. The programs have tended to emphasize smaller classes with low student/teacher ratio, personalized and individualized attention to student needs, remedial instruction or tutoring in basic skills, immediate feedback, and rewarding student achievement.

Clifford (1990) exhorted educators to replace coercive, constraint-laden programs with autonomous, supportive programs. Educational leaders and program planners throughout the various states responded to this mandate by establishing a variety of alternative elementary and middle school programs, many self-contained, as one way of reducing the number of students who drop out of school. One Baltimore alternative program, Success For All, provided immediate and intensive interventions when learning problems occurred. Scores indicated improved achievement by the targeted students (Madden, Slavin, Karweit, & Livermon, 1989). An elementary alternative program in the Bronx, called the Urban

Academy Program, was a dropout prevention demonstration program which involved 78 at-risk middle school children. The program combined a high-interest curriculum and extensive social services. A major result of the project was that students improved their reading scores more than would have normally been expected in a year's time (New York City Board of Education, 1989).

Crosby and Owens (1993) suggested that cooperative learning was an effective component for dropout prevention programs. By building on the social instincts of children as they worked toward improvement of academic and social skills, this strategy has important benefits for elementary at-risk students and would positively affect reading achievement.

A Review of Selected Dropout Prevention Programs

Parent Educational Follow Through Program (PEFTP), a compensatory elementary education program in Richmond, Virginia, was intended for low-income children in the primary grades. The program focused on parent involvement and parent participation. A longitudinal study reported that there was a significant difference in the dropout rate which favored students participating in PEFTP (Rubin, Olmsted, Szegda, Wetherby, & Williams, 1983). An Austin, Texas, study found that it was best to provide alternative instruction for lower achievers and at-risk students. The study also showed that grade retention did not work with this population (Schuyler & Turner, 1986). A District of Columbia alternative education program, Fresh Start Minischool (FSMS), identified 125 students with few areas of skill mastery. The approach was characterized by individualized instruction at the student's own pace with a no-fail philosophy. Findings showed that the students made significant gains in reading and that FSMS students stayed in school (District of Columbia Public Schools, 1980).

STRIVE was a special instructional program in Washington, DC, which provided an intensive, instructional milieu for over-aged, low-performing ninth graders who were perceived to be at-risk. STRIVE students significantly outperformed non-STRIVE students in all academic areas, including reading, on the Metropolitan Achievement Test-6. In a study of several alternative programs in the Boston School System, Farrar and Connolly (1989) found increased reading achievement for student participants. Under the New York City Public Schools Promotional Gates Program, students who failed to attain their promotional criteria in reading and math were retained for a year of intensive remedial instruction. The majority of the Gates's students made significant gains while in the program, particularly in reading achievement (Gampert, 1989).

The SWAS (School Within A School) program, a self-contained dropout intervention program designed for at-risk middle school students in Kingstown, Rhode Island, focused on improved reading achievement. The results indicated that 84%

of the participants improved their grades. The elementary Attendance Improvement Dropout Prevention Program (AIDP), a New York state alternative program, was designed to serve to students considered to be at risk due to attendance and other factors. The majority of the students in the program improved their achievement levels and were promoted to the next class (Solomon & Yacker, 1989).

The dropout problem in the state of Florida was particularly acute because of the dramatic increase in population, including a significant transient and foreign population. To compound this problem, over 30% of Florida's children lived in poverty (Hodgkinson, 1989). Former Florida Education Commission Betty Castor called for dropout prevention to be the state's number one priority (Castor, 1988).

Beginning in 1986 with the Dropout Prevention Act, the state of Florida initiated a variety of programs to keep at-risk students in school. Initial programs were focused at high school students, with an emphasis on academic skills. Since that time, state educational planners turned their attention to elementary students so that all children from pre-kindergarten to grade 12 would be eligible for support. The Governor's Commission on the Reform of Education (1990) called for a particular emphasis on kindergarten to grade 5. This report urged an intensive focus on K-3 reading, which it considered to be the most important subject in elementary school. Thousands of Florida students were found to be illiterate. These problems originate in grade school and must be solved in grade school (Governor's Commission on the Reform of Education, 1990). A longitudinal study in Leon County recommended early intervention and found that the characteristics of a successful dropout prevention were program autonomy, self-contained classes, and a focus on basic skills (Castor, 1988). Another study conducted by Florida Atlantic University also confirmed the necessity of early identification and suggested implementing alternative programs in grades 4 through 8 (Ehren, Lenz, & Swanson, 1986).

The Florida Legislature enacted the Florida Primary Education Program (PREP) and Florida Progress in Middle Childhood Education Program (PRIME) statutes as well as a pre-kindergarten program. The PREP program recognized a need for comprehensive improvement program in grades K-3. Funds were provided for developmental strategies, enrichment strategies, preventive strategies, and primary specialists. The PRIME program recognized the complex transition from elementary school to high school. Funds were provided for enrichment strategies, resource teachers, preventive strategies, and transition from junior high schools to middle schools (State of Florida, 1991). Florida's prekindergarten early intervention program for children ages 3 and 4 were administered by school districts. Participating districts developed a plan for serving economically disadvantaged students. These programs included enhancing existing early childhood, prekindergarten, or child-care programs provided by public or private agencies (Florida Statutes 230.2305) (State of Florida, 1991). The federal government has also provided Chapter One services since 1965. However, a more intense and innovative approach was needed. A number of Florida school districts created alternative programs, many self-contained, to meet the needs of the at-risk elementary student population. In the 1991 edition of Florida Trends in Education, it was reported that five Florida counties had decreased their dropout rate significantly. Among these counties were Hillsborough County, where all 95 elementary schools had dropout prevention programs; Bay County, where alternative programs were provided for at-risk students from grades 6 through high school; and Madison County, where programs were established in grades 4 through 12 with a strong emphasis on the middle school years (A. Manning, personal communication, January 4, 1991).

Other alternative programs begun by various Florida counties included Griffin's Alternative Learning Academy (GALA), a middle school program in Leon County and Brevard County's Andrew Jackson Middle School, a program that emphasized self-esteem and basic skills. The program at Andrew Jackson, which focused on reading achievement, was recognized as exemplary by the Florida Department of

Education. The A Team, a Manatee County program housed at Sugg Middle school, featured small classes with an emphasis on academic achievement. Again, the program focused on reading achievement as a means of improving overall academic achievement.

The Woods, an alternative middle school in Sarasota County, focused on students with low academic achievement and included successful strategies that interrupted the established cycles of failure. ALPHA was a Palm Beach County voluntary program for middle school students who were unsuccessful in the classroom setting. Operated in conjunction with a private agency, the ALPHA program offered students an alternative classroom setting that concentrated on academic achievement with emphasis on improved reading achievement. Counseling was also an integral component. The goal of the ALPHA program at Fairview Middle School in Leon County was to mainstream at-risk students as soon as possible after intensive tutoring and an emphasis on academic achievement (A. Manning, personal communication, January 4, 1991).

The Model School Adjustment Program (MSAP) was a self-contained school-based program for at-risk students in grades 6 through 8. Low academic achievement and grade retention were among the criteria for entry. The program was designed to interact with the regular school curriculum and the business community. This program was implemented at

Driftwood Middle School in Broward County, where students were identified as being at risk upon entry into the sixth grade due to lack of academic achievement. Data collected demonstrated success (Peck, 1987).

Project COMET (Career Opportunities Motivated through Educational Technology) in Dade County was a Florida program of excellence. Project COMET provided success in career-related "hands-on" activities simulating the world of work to elementary students considered at risk. The program reinforced the correlation of the attainment of basic academic skills and the application of these skills in career laboratory activities. Computer activities were correlated with "hands-on" experiences and specific career tasks. This program was designed for fourth-, fifth-, and sixth-grade students who met the program eligibility criteria. The student-adult ratio was 15 to 2 (Florida Department of Education, 1989b).

The Personalized Education Program (PEP) was another Florida program of excellence. This program was developed for elementary sites in Hillsborough County. It provided a multifaceted learning environment specifically for children whose behavior problems interfered with their learning processes. The program was designed to decrease inappropriate behavior while increasing academic skills. Prevocational opportunities were also offered. The student-teacher ratio for PEP was 20 to 1. Each student was required to have an Individualized Educational Plan (IEP), and reading, language arts, and math were specifically targeted. Content-related activities and career awareness field trips were used to motivate the students. A guidance counselor worked closely with both students and teachers (Florida Department of Education, 1989b).

Leon County's Education Through Choice was also a Florida program of excellence. This elementary program was an alternative to the traditional educational program and served fourth- and fifth-grade students who were unsuccessful, disinterested, or disruptive. The curriculum incorporated the county's scope and sequence with emphasis on integrating the academic content in a unified, developmental approach rather than the content being presented through separate and unconnected disciplines. The curriculum connected the classroom to the real world (Florida Department of Education, 1989b).

Palm Beach County developed a district-wide program that was recognized by the Florida Department of Education as a program of quality. Entitled Potentially Gifted Minority Student Project, the program was designed to improved the identification process and to give minority students a better opportunity to have their abilities recognized and challenged. The targeted groups were minority students who were educationally disadvantaged because they did not have an instructional program appropriate for their documented ability level. Each class contained 16 students and emphasized individualized instruction. The children were taught to be problem solvers and to develop the self-confidence to work independently. Parents played a major role in the success of the project and were required to attend three orientation sessions (Florida Department of Education, 1989b).

Florida school districts adapted several nationally recognized and validated programs that were suitable for local use. Originally developed in Utah, Basic Literacy Through Microcomputers (BLTM) was a program, used in Clay and Orange Counties, in which the computer did not replace the teacher but provided opportunities for students through reinforced practice. Students exposed to the program had significantly higher scores on the Gates-MacGintie Reading test (Florida Department of Education, 1989b).

A Montana program, Content Reading Including Study Systems (CRISS), taught strategies to make learning from a text easier for students. Suitable for grades 4 and higher, program components ranged from textbook analysis to identifying the main idea. Components were also integrated into existing curricular offerings. Participants demonstrated significantly higher retention of content area information. Florida districts which used this program were Baker, Bradford, Citrus, Columbia, Dixie, Flagler, Gilchrist, Lafayette, Levy, Palm Beach, Putnam, Polk, and Union (Florida Department of Education, 1989b).

Early Prevention of School Failure (EPSF) was first provided in Illinois and then used in Florida's Jackson County. Nationally validated for ages 4 to 6, EPSF was a screening and curriculum program designed to prevent school failure by identifying the developmental levels and learning styles of children. The staff development associated with the program equipped teachers with skills and competencies to match curriculum levels of development. Gain rates of high-risk children over a 3-year period averaged 1.39 months to 3.12 months for each month in the program. Students with moderate learning needs also achieved according to expectations. Gains made during kindergarten persisted into subsequent years (Florida Department of Education, 1989b).

Alachua and Dade counties adapted a Chapter One program used originally in New York City. The program, Learning To Read Through The Arts Program, provided for reading teachers, classroom teachers, art teachers, and professional artists to work with elementary students who were eligible for Chapter One services. An overall approach to improving reading was used in this intensive, diagnostic, individualized program. Listening, speaking, writing, and reading techniques were stressed in reading-oriented art workshops. Participating students met with the group of selected teachers in a whole class or small group 4 hours per week. Students also received additional reading instruction in the reading-oriented art workshops in such areas as theater, dance, music, crafts, and sculpture. The resources of museums, cultural institutions, universities, resource centers, and libraries were also used in addition to special programs and field trips. Participating teachers received intense staff development (Florida Department of Education, 1989b).

Project CAP (Career Awareness Program) was an Arizona program adapted by Putnam County. This program infused career awareness into the regular curriculum for elementary students. The program complemented the basic skills curriculum within the school with the goal that participating students would grow in awareness of themselves in relation to the world of work. Skills in academic disciplines were reinforced through the use of career awareness learning activity packets. Students who received this treatment outperformed those who did not receive the treatment by a considerable margin in all areas of measurement (Florida Department of Education, 1989b).

Team Accelerated Instruction: Mathematics (TAI) was a program developed in Maryland and used in Lee County. The program helped teachers meet the diversity of students' needs through the use of cooperative learning. The teachers provided concept instruction in small homogeneous groups while students practiced at their own pace in heterogenous learning teams. The program accelerated the achievement of all students. The program also improved student social interaction and enhanced student motivation (Florida Department of Education, 1989b).

Another Florida program, Reeling Kids in through Reading, was a supplemental reading intervention program for fourth-grade students. Strategies addressed reading comprehension, attitudes toward reading, knowledge of children's classics, and increased time spent on reading. The results revealed significant gains in reading achievement as well as improved attitude towards reading (Norris, 1990).

Who Florida Serves in Dropout Prevention Programs and the Dollars Spent on These Programs

During 1989-90, educational alternatives programs in Florida served 34,843 students. Sixty-two percent, or 21,702, of these students were over-age for grade. Of the program total, 40%, or 13,821, were female; 60%, or 21,022, were male; 53% were white; 47% were minorities including blacks, Hispanics, and Asian/Indian (Florida Department of Education, 1991a).

In 1991-92, students participating in all dropout prevention programs generated a weighted cost factor of 1.707 through the Florida Education Finance Program. This equated to approximately $4,429.67 per full-time student annually. A total of 70,339.99 FTEs were projected for 1991-92 dropout prevention programs. This equated to approximately $313,797,778.50 allocated for dropout prevention programs in 1991-92 (Florida Department of Education, 1992c).

In 1992-93, students participating in dropout prevention programs generated a weighted cost factor of 1.656 through the Florida Education Finance Program. This equated to approximately $4276.27 per full-time student annually. A total of 75,260 FTEs were projected for 1992-93 dropout prevention programs. This equated to approximately $381,832,080.20 allocated for dropout prevention programs in 1992-93 (Florida Department of Education, 1993).

A report by the Department of Education cited leadership as a prime factor in successful dropout prevention programs. This leadership included increased proactive movement in dropout prevention and a change in district leadership and/or a change in the dropout prevention coordinator. Educational leaders were also impacted by an increased activity of task forces and advisory councils. In addition, strong, proactive district administrators and principals tended to impact positively dropout percentages (A. Manning, personal communication, May, 1991).

Included in the belief statements of Florida's Blueprint 2000 is recognition that decisions about teaching and learning should be made as close as possible to the students impacted by those decisions. Facilitating Blueprint 2000 is a primary role of educational leaders. At the district level, leaders are responsible for establishing advisory committees, developing a process for approval of school improvement plans, providing assistance to schools that do not made adequate progress toward school improvement, providing public information regarding program and student performance, and reporting on progress toward school improvement. At the school level, leadership is an essential element in development, revision, and successful implementation of the school improvement plans. Strategies for working with at-risk students must be addressed in school improvement plans (Florida Commission on Education Reform and Accountability, 1992).

From this brief review, it is evident that there is a need to expand the body of knowledge in the area of dropout prevention as it relates to the reading achievement of elementary students. Therefore, it is an essential and professional obligation for all administrators and supervisors to accept the challenge of providing early intervention for students who are potential dropouts.

CHAPTER 3
THE DESIGN OF THE STUDY

Purpose of the Study

The purpose of this study was to determine the effect of a self-contained dropout prevention program on reading achievement and attendance of selected at-risk elementary students. The study focused on a central Florida school district that responded to a Florida statute that encouraged the creation of dropout prevention programs by developing Project START (Success Through Alternative Rewards and Trust). One of Project START's objectives was to strengthen academic performance, particularly in the area of reading achievement. Improved attendance was also a student outcome objective.

Two questions were considered as the basis for this study.

1. Was there a significant difference in the standardized reading achievement scores of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for reading achievement scores from the previous year?

2. Was there a significant difference in attendance of identified at-risk fourth-grade students who participated in Project START and identified fourth-grade students who did not participate in Project START controlling for attendance from the previous year?

Population and Sample

The sample for this study was drawn from all the fourth-grade classes in schools that had implemented Project START in a middle-sized central Florida school district of about 50,000 students. The fourth-grade classes represented each geographic region within the school district (urban, suburban, and rural) and each socioeconomic stratum. The sample for the treatment group consisted of selected students in 17 fourth-grade classes, each with a maximum of 15 students, who participated in the START program for a full year and who did not receive any other support services such as Exceptional Student Education (ESE) or English for Speakers of Other Languages (ESOL). The sample for the control group consisted of fourth-grade students from the same schools who did not participate in Project START but who met the same eligibility criteria as the identified Project START students and who did not receive any other support services such as Exceptional Student Education (ESE) or English for Speakers of Other Languages (ESOL). The control group participated in the traditional school program at the school for a full year.

The central Florida school district used in this study had 36 elementary schools in 1990-1991. Forty-seven percent of the elementary schools were represented in the study. The total number of fourth-grade classes in the school district was 108. Fifteen percent were Project START classes. Six percent of all fourth-grade students in the district participated in Project START. The sample in this study represented 33% of the 204 fourth-grade students participating in Project START. Seven percent of the total fourth-grade population for the district was represented in the sample. A descriptive demographic profile of dropout prevention schools, classes, and the sample selected is shown in Table 3.1.

Selected student participants in identified Project START classes met the eligibility criterion of a stanine of 4 or below on the CTBS norm-referenced test. Although students participating in Project START may have met other eligibility criteria listed in the district Comprehensive Dropout Prevention Plan, participants in this study were limited to those who met the criterion of a stanine of 4 or below on a standardized reading test to ensure the equivalence of the two groups.

Improved attendance was an outcome objective and an eligibility criterion of Project START. Although not identified for the sample based on this criterion, the attendance of participants in this study were compared to

Table 3.1

Descriptive Demographic Profile

Total Number of Elementary Schools	Total Number of Project START Schools	Percentage of Schools Participating in Project START
36	17	47%
Total Number of 4th-Grade Classes	Total Number of Project START 4th-Grade Classes	Percentage of 4th-Grade Classes Participating in Project START
108	17	15%
Total Number of 4th-Grade Students	Total number of 4th-Grade Project Start Students	Percentage of 4th-Grade Students Participating in Project START
3,024	204	6%
Total Project START 4th-Grade Students	Sample Total	Percentage of Project Start 4th-Grade Used in Sample
204	68	33%
Total Number of 4th-Grade Students	Sample Total	Percentage of Total 4th-Grade Students
3,024	187	7%

determine if there was a significant difference in attendance patterns between the two groups.

Student admission to Project START required several steps. Students were recommended to participate in Project START by teachers, guidance counselors, parents, and administrators. Student records were examined to document eligibility by a team of educators which included the principal, the guidance counselor, and the START teacher. Eligible students were then referred to the student success team.

The student success team was a school-based team consisting of a building-level administrator, a social worker, a school psychologist, the elementary resource teacher, and the classroom teacher. That team reviewed students who had been referred to them because of academic, social, emotional, or physical problems. That team recommended strategies to correct the individual student problem and closely monitored progress throughout the year. If the recommended strategies were not successful, students were then recommended for additional testing and evaluation.

As a part of the admission procedures for Project START, the student success team determined if participation in Project START would be educationally appropriate for each individual student. Preference was given to those students with the greatest need and who could benefit from the services since class size was limited to 15 students. Student participation in the program was voluntary, and parents had to approve their child's participation in the program.

The curriculum for Project START was similar to the regular elementary program of integrated studies with increased emphasis reading skills. Students received physical activity via the regular physical education program of the school. Both music and art were planned in cooperation with the designated Project START teacher to provide relevance, integration of learning, and continuity. The teachers in the START program used a counseling approach to learning in order to build trust, inspire confidence, and allow the students to assume the responsibility for the learning process. Other special teaching strategies included using the newspaper to teach content and develop skill, computer-assisted instruction, cooperative learning, modification of course content, specific achievable academic goals for each student, field trips, career awareness activities, hands-on activities matched learning styles, and close coordination with parents, student services, and outside agencies as needed to monitor and encourage regular attendance and academic achievement.

In the START program, integration of learning was supported by the use of Winning Moments, Level 10 of Macmillan's Reading Express. This series was an alternative to the basal reader used in the traditional fourth-grade classroom. Reading Express was designed to address the special needs of "at-risk" students and their teachers by de-emphasizing isolated skill and drill and focusing on more whole language strategies and thematic units. In contrast, Sketches, Level 10 of Macmillan's Connections which was used in the traditional fourth-grade classroom, had a more traditional curricular approach emphasizing skill-building.

In Project START, reading was diagnosed by CTBS reading test scores from the previous year and the reading unit test scores from Macmillan's Connections from the previous year. Project START teachers remediated identified reading deficiencies using the whole language techniques provided by the high interest, lower readability level of Macmillan's Express.

The teachers in Project START were selected at the discretion of the individual school principal as were the teachers in the traditional classroom. Project START teachers represented a cross section of the total teaching population in the district. The teachers were required to hold a valid Florida teacher certificate. The intent of the district was that teachers were selected because of their interest in the program, their prior experience, their skill level, and their ability to work with "at-risk" elementary students. There was no mandatory staff development specifically designed for Project START teachers. Project START teachers selected their own staff development opportunities through the Teacher Education Center and the district dropout prevention specialist, and they participated in these activities throughout the year. These selections were based on their individual needs and desires to attend.

A review of staff development records indicated that, in 1991-1992, Project START teachers participated in reading workshops which included Reading PK-5, Cooperative Learning, Helping the Nonaverage Child, Language Arts K-5, Computer Literacy, Learning Styles/Right-Left Brain, Role of the Chapter I Teacher, Integrated Learning, and Dropout Prevention. Those workshops were also available to teachers in the traditional program. It must be noted that there were various levels of participation in the workshops listed above. Some Project START teachers did not participate in any staff development in 1991-1992.

Project START classes were staffed at a teacher/student ratio of 1:15. Traditional fourth-grade classes were staffed at a teacher/student ratio of 1:28. Students participating in Project START generated a weighted cost factor of 1.707 or ($4429.67) through the Florida Educational Finance Program in 1991-1992. Comparable students in the traditional program generated a cost factor of 1.0 or ($2595.00) through the Florida Educational Finance Program in 1991-1992.

Instrumentation

A nationally normed test, the California Test of Basic Skills, Fourth Edition (CTBS/4), was used in the research. The test measured basic skills in reading, language, spelling, mathematics, study skills, science, and social studies. The CTBS/4 test was constructed on a modular basis, with some modules designed to meet the need for valid and reliable norm-referenced information and others designed to meet the specific need for accurate and useful curriculum information. The content measured by the CTBS/4 test was determined through utilization of McGraw-Hill's proven test development procedures. Publishers at McGraw-Hill asserted that the use of these development procedures ensured the test user that the CTBS test measured what was being taught in today's schools with "unmatched validity and reliability." Nine steps were involved in the process of ensuring that the content of the CTBS/4 test was relevant, current, and targeted in order to identify specific instructional needs. These steps were comprehensive curriculum taxonomy, thinking skills classification, application of detailed content and skill specifications, expanded item pool, attention to bias reduction, comprehensive tryout studies, multifaceted approach to item analysis, technologically advanced item selection procedures, and final sets of items chosen for the various CTBS/4 components (CTB/McGraw-Hill Company, 1989).

The standardization of the CTBS/4 test was designed to produce norms that were an accurate reflection of the achievement levels of the nations students as a whole. To develop the norms for CTBS/4, a sample of students representative of the national student population was selected. Items selected from the tryout were assembled into a standardization edition. The final version of the test was administered to the national sample in the spring and fall of

1988. Data from this sample were used to develop the test norms (CTB/McGraw-Hill Company, 1989). This standardization allowed school districts to compare the achievement levels of their students with that of students in the rest of the nation's schools. Students in the norm groups were identified by stratified random sampling procedures. School districts were stratified by region, community type, size, and the Orshansky percentile, which is an indicator of a district's socioeconomic status (CTB/McGraw-Hill, 1989).

Publishers at McGraw-Hill utilized the three parameter Item Response Theory (IRT) model in publication of the CTBS test. The IRT model assumed that test items differ and may be described in terms of three characteristics or parameters: difficulty, discrimination, and "guessability." This model provided a greater accuracy of measurement and represented more closely what really happens during the testing process. Its use facilitated and strengthened the test development process and provided a demonstrable increase in accuracy of measurement (CTB/McGraw-Hill Company, 1989).

Research Design

The statistical method used for the research questions of this study was analysis of covariance (ANCOVA). The ANCOVA includes a statistical comparison of a continuous outcome variable among two or more groups using a covariate to increase power. The statistical hypothesis was tested at the .05 level of significance. The analysis of covariance was run on the SAS computer program. In research question 1, the reading scores of the identified fourth-grade students participating in Project START were compared to the reading scores of comparable fourth graders who participated in the traditional school program. Reading achievement scores from the previous school year, 1990-1991, were used as a covariate for both groups. The reading achievement scores from the norm-referenced CTBS test given in April 1992 were used as the outcome variable in research question 1. The independent variable was the group in which they were served (Project START or regular program). In research question 2, the attendance of the identified fourth-grade students participating in Project START was compared to the attendance for the school year of comparable fourth-grade students who participated in the traditional school program. The attendance in 1991-1992 gathered from individual student records was used as the outcome variable. The independent variable was the group in which they were served (Project START or regular program). As a follow-up to the analysis, adjusted means for the posttest values were calculated and compared with the pretest grand means for both reading scores and days present.

The pretest-posttest control-group design was used to test the effect of a self-contained dropout prevention program on reading achievement and attendance. Both groups were observed prior to the treatment and again after the treatment was administered to the treatment group. This design is shown in Tables 3.2 and 3.3.

Table 3.2

Research Design for Question 1

	CTBS Spr.'91	Project START	CTBS Spr '92
Treatment Group	pretest	treatment	posttest
Control Group	pretest		posttest

Table 3.3

Research Design for Question 2

	Number of Days Present 1990-1991	Project START	Number of Days Present 1991-1992
Treatment Group	pretest	treatment	posttest
Control Group	pretest		posttest

Null Hypotheses

The following null hypotheses guided the investigation.

1. There is no significant difference in the CTBS test scores in reading achievement between identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not

participate in Project START with reading achievement scores from the previous year as a covariate.

2. There is no significant difference in the attendance of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START with attendance from the previous year as a covariate.

Threats to Validity and Reliability

Teachers of students who were the subjects for this study were not aware that their CTBS/4 reading achievement scores for 1991 would be used in a quantitative study. This strategy eliminated test administrator bias, the Hawthorne Effect, and the John Henry Effect upon the participating fourth-grade students. Uniform administration of the CTBS/4 test could not be guaranteed nor could the optimum physical and emotional well being of each student during the test-taking period be insured.

Participating teachers were of varying ability and experience. The research was limited to one middle-sized Florida county. The research was for a 1-year period (1992) with reading achievement scores and attendance from the previous year (1991) used as covariates. This fact may have limited the reliability of the results.

Students participating in the research were not aware that an experiment was being performed. Neither students in the treatment group nor students in the control group knew that they were in their respective groups. None of the students in either group knew that a study was being conducted. Therefore, compensatory rivalry by respondents was eliminated and was not a threat to the internal validity of the research.

Summary

The research design described in this chapter will serve as an effective means to ascertain answers to the three major quantitative questions proposed.

CHAPTER 4
RESULTS OF THE STUDY

Statement of the Purpose

The purpose of this study was to determine the effect of a self-contained dropout prevention program on reading achievement and attendance of selected at-risk elementary students. The research focused on a central Florida school district that responded to a Florida statute that encouraged the creation of dropout prevention programs by developing Project START (Success Through Alternative Rewards and Trust). One of Project START's objectives was to strengthen academic performance, particularly in the area of reading achievement. Improved attendance was also a student outcome objective.

Two questions were considered as the basis for this study.

1. Was there a significant difference in standardized reading achievement scores between identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for reading achievement scores from the previous year?

2. Was there a significant difference in attendance of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for attendance from the previous year?

Data Collection

The sample for this study was drawn from all the fourth-grade classes in schools that had implemented Project START in a middle-sized central Florida school district of about 50,000 students. The fourth-grade classes represented each geographic region within the school district (urban, suburban, and rural) and each socioeconomic stratum. The sample for the treatment group consisted of selected students served in 17 fourth-grade classes, each with a maximum of 15 students who participated in the START program for a full year and who did not receive any other support services such as Exceptional Student Education (ESE) or English for Speakers of Other Languages (ESOL). The sample for the control group consisted of fourth-grade students from these same schools who did not participate in Project START but who met the same eligibility criteria as the identified Project START students and who did not receive any other support services such as Exceptional Student Education (ESE) or English for Speakers of Other Languages (ESOL). Students in the control group received their instruction in the traditional school program for a full year.

Statistical Methodology

The statistical method used for the research questions of this study was analysis of covariance (ANCOVA). The ANCOVA includes a statistical comparison of a continuous outcome variable among two or more groups using a covariate to increase power. The statistical hypothesis was tested at the .05 level of significance. The analysis of covariance was run on the SAS computer program. As a follow-up to the analysis, adjusted means for the posttest values were calculated and compared with the pretest grand means for both reading scores and days present. In research question 1, the reading scores of the identified fourth-grade students participating in Project START were compared to the reading scores for the school year of comparable fourth graders who did not participate in the program. Reading achievement scores from the previous school year, 1990-1991, were used as a covariate for both groups. The reading achievement scores from the norm-referenced CTBS test given in April 1992 were used as the outcome variable in research question 1. The independent variable was the group in which they were served (Project START or regular program). In research question 2, the attendance of the identified fourth-grade students participating in Project START was compared to the attendance for the school year of comparable fourth-grade students who did not participate in the program. The attendance for the school year from the previous year, 1990-1991, was used as a covariate for both groups. The attendance in 1991-1992 gathered from individual student records was used as the outcome variable. The independent variable was the group in which they were served (Project START or regular program).

Analysis of the First Hypothesis

HO1: There is no significant difference in CTBS test scores in reading achievement between identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START with reading achievement scores from the previous year as the covariate.

An analysis of covariance was performed to test the first statistical hypothesis. To analyze this hypothesis, reading achievement scores from the Comprehensive Test of Basic Skills were used. The reading achievement scores between the treatment and the control groups were compared. The reading achievement scores from the norm-referenced CTBS given in April 1992 were the outcome variable. The covariate was the third-grade reading scores. The independent variable was the group in which the students were served. The means and standard deviations are listed in Table 4.1.

A one-way ANCOVA was used to test the first hypothesis to determine the main effect of the dropout prevention treatment on the Comprehensive Test of Basic Skills reading achievement scores using the .05 level of significance. If the probability factor was less than the

Table 4.1

Descriptive Statistics for HO1

Group	Variable	N	Pre Mean	Pre SD	Post Mean	Post SD
Drop.Prev. (Treatment)	CTBS Reading	68	32.147	8.974	33.455	11.347
Non-DOP (Control)	CTBS Reading	119	36.840	7.25	41.366	11.267
Total	CTBS Reading	187	35.133	8.22	38.471	11.890

level of significance, then it was significant and the null would be rejected. The F value calculated was 7.83 and the probability factor was .0001 which is less than the .05 level of significance. Thus, significant differences were found between the groups in favor of the control group using pretest scores as a covariate. The control group included students who were eligible but did not participate in Project START. These students participated in the traditional school program at the same school for a full year. Results of the ANCOVA for the first hypothesis are reported in Table 4.2.

The results of this analysis indicated a significant difference ($p < .05$) between the control group (n=119) and the treatment group (n=68) in CTBS reading achievement scores in 1991-1992 controlling for test scores from the previous year. The significance was in favor of the control group which included the students who were eligible, but did not

Table 4.2

Results of HO1

Source	DF	Sum of Squares	Mean Square	F Value	PR>F
Model	2	9910.35	4955.17	55.65	0.0001
Error	184	16384.23	89.04		
Cor.Tot.	186	26294.58			

Source	DF	Type III SS	F Value	PR>F
GRP	1	697.61	7.83	0.0057

participate in Project START. The probability factor (.0001) was less than the level of significance (.05); therefore the difference was significant and the null hypothesis was rejected. The results of these statistics indicated that participation in a self-contained dropout prevention program did not have an effect on improved reading achievement of at-risk students. Students in the control group made significantly greater gains in reading achievement than the treatment group. These students participated in the traditional school program for a full year.

Prior to performing the analyses, the assumption of homogeneity of variance was tested. The one-way ANCOVA for the first hypothesis operated under the assumption of homogeneous slopes. If this assumption was violated, this would be an indication of significant interaction between the independent variable and the covariate, resulting in the ANCOVA being biased. Therefore, an ANCOVA was performed to test the interaction effects between the independent variable and the covariate. The test for interaction resulted in an F value of .55 which indicated no statistically significant interaction between the independent variable and the covariate. The assumption of homogeneous slopes was, therefore, met, and the results were not biased.

Adjusted means for posttest values were calculated and compared with the pretest grand means for reading achievement in HO1. The adjusted gain for the experimental group was +0.16 in reading achievement. The adjusted gain for the control group was +5.16. These results further support the results of the ANCOVA for HO1. Results of the adjusted means for reading achievement are reported in Table 4.3.

Table 4.3

Results of Adjusted Means for Reading Achievement-HO1

	Mean $\bar{X}$	Adjusted Mean (Post)	Adjusted Gain
Experimental			
Pretest	35.133	35.29	+0.16
Posttest	38.47		
Control			
Pretest	35.133	40.29	+5.16
Posttest	38.47		

Analysis of the Second Hypothesis

HO2: There is no significant difference in the attendance between identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START with attendance from the previous year as a covariate.

An analysis of covariance was used to test the second statistical hypothesis. To analyze the second hypothesis, attendance was calculated by counting the number of days each student was present. The treatment and control groups were compared using these attendance figures. The outcome variable was the attendance in 1991-1992 gathered from individual student records. The covariate was the student's attendance record from 1990-1991. The independent variable was the group in which the students were served. The means and standard deviations are listed in Table 4.4.

A one-way ANCOVA was used to test the second hypothesis to determine the main effect of the dropout prevention treatment on attendance using .05 as the level of significance. If the probability factor was less than the level of significance, then it was significant and the null would be rejected. The F value calculated was 8.12, and the probability factor was .0001 which was less than the .05 level of significance. Thus, significant differences were found between groups in favor of the control group using previous years attendance as a covariate. The nondropout

Table 4.4

Descriptive Statistics for HO2

Group	Variable	N	Pretest Mean	Pretest St.Dev	Post Mean	Post SD
Drop.Pre. (Treatment)	# of days present	68	166.573	16.515	166.176	13.066
Non-DOP (Control)	# of days present	119	171.226	8.809	171.512	6.919
Total	# of days present	187	169.534	12.349	169.572	9.924

prevention (control) group included students who were eligible but did not participate in Project START. These students participated in the traditional school program at the same school for a full year. Results of the ANCOVA for the second hypothesis are reported in Table 4.5.

The results of this analysis indicated a significant difference (p < .05) between the control group (n=119) and the treatment group (n=68) in school attendance in 1991-1992 controlling for attendance from the previous year. The significance was in favor of the control group which included students who were eligible but did not participate in Project START. The probability factor was less than the level of significance. Again, the hypothesis was rejected. The results of these statistics indicated that participation in a self-contained dropout prevention program did not have an

Table 4.5

Results of Ancova for HO2

Source	DF	Sum of Squares	Mean Square	F Value	PR>F
Model	2	3797.212	1898.606	24.05	0.0001
Error	184	14524.563	78.937		
Cor.Tot.	186	18321.775			

Source	DF	Type III SS	F Value	PR>F
GRP	1	640.748	8.12	0.0049

effect on improved attendance of at-risk students. Students in the control group made significant gains in attendance. These students participated in the traditional school program for a full year. Attendance of students who participated in Project START (treatment group) actually decreased.

Prior to performing the analyses, the assumption of homogeneity of variance was tested to ensure that the statistics were valid and without error. The one-way ANCOVA for the first hypothesis operated under the assumption of homogeneous slopes. Therefore, an ANCOVA was performed to test the interaction effects between the independent variable and the covariate. The test for interaction resulted in an F value of .16 which indicated no statistically significant interaction between the independent variable and the covariate. The assumption of homogeneous slopes was, therefore, met, and the results were not biased.

Adjusted means for posttest values were calculated and compared with the pretest grand means for number of days present in HO2. The adjusted gain for the experimental group was -1.99 in number of days present. The adjusted gain for the control group was +1.21. These results further support the results of the ANCOVA for HO2. Results of the adjusted means for number of days present are reported in Table 4.6.

Table 4.6

Results of Adjusted Means for Number of Days Present-HO2

	Mean $\bar{X}$	Adjusted Mean (Post)	Adjusted Gain
Experimental			
Pretest	169.53	167.54	-1.99
Posttest	169.57		
Control			
Pretest	169.53	170.743	+1.21
Posttest	169.57		

Summary

The effect of a self-contained dropout prevention program on reading achievement and attendance was investigated. The CTBS scores and attendance of students participating in the program were compared with a control group of students who met the program eligibility criteria but did not participate. The CTBS scores and attendance were analyzed using an ANCOVA. Analysis of these data indicated that when reading achievement scores and attendance were compared, participation in the program was not associated with improvement in reading achievement or attendance.

CHAPTER 5
SUMMARY

Summary of the Research

To meet the overwhelming needs of a growing "at risk" student population, a variety of programs have been initiated and established at the secondary school level in Florida. However, it was recognized both at the national and at the state levels that intervention strategies must begin at an earlier age and at a lower grade level. Therefore, the state of Florida, through the Department of Education and the Dropout Prevention Act of 1986, encouraged each county to develop dropout prevention programs for students in grades 4 and 5 who met eligibility criteria which targeted them as "at risk." Although the state provided general guidelines for the counties to use, each county developed programs that specifically and uniquely met the needs of its own at-risk student population. The problem was to devise a successful elementary program that addressed the needs of potential high school dropouts.

One central Florida school district responded to the Florida statute that encouraged the creation of dropout prevention programs by developing Project START (Success Through Alternative Rewards and Trust). One objective of

Project START was to strengthen academic performance, particularly in the area of reading achievement. Improved attendance and promotion to the next grade level were also student objectives.

Although reading achievement had been identified as a prime indicator of school success and completion (Slavin et al., 1993), this central Florida school district had not assessed the effect of Project START on reading achievement and also had not determined the impact of Project START on attendance. These data were not available through the Department of Education student data base by program category by school. This research examined all three variables as they related to program participants in Project START. Additionally, this research examined the three variables as they related to students who were eligible for the program but were not served.

The purpose of this study was to determine the effect of a self-contained dropout prevention program on reading achievement and attendance of selected at-risk elementary students.

The following questions guided the conduct of this study.

1. Was there a significant difference in the standardized reading achievement scores of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not

participate in Project START controlling for reading achievement scores from the previous year?

2. Was there a significant difference in the attendance of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START controlling for attendance from the previous year?

The following null hypotheses guided the investigation.

1. There is no significant difference between the CTBS test scores in reading achievement of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START with reading achievement scores from the previous year as the covariate.

2. There is no significant difference in the attendance of identified at-risk fourth-grade students who participated in Project START and identified at-risk fourth-grade students who did not participate in Project START with attendance from the previous year as a covariate.

The reading scores and attendance of the identified at-risk fourth-grade students participating in Project START (treatment group) were compared to the reading scores and attendance for the school year of comparable fourth graders who did not participate in the program (control group). In research question 1, reading achievement scores for the school year from the previous school year, 1990-1991, were used as a covariate for both groups. The reading achievement scores from the norm-referenced CTBS test given in April 1992 were used as the outcome variable. The independent variable was the group in which they were served (Project START or regular program). In research question 2, the attendance from the previous school year, 1990-1991, was used as a covariate for both groups. The attendance in 1991-1992 gathered from individual student records was used as the outcome variable. The independent variable was the group in which they were served (Project START or regular program).

The statistical test for the research was analysis of covariance (ANCOVA). The ANCOVA includes a statistical comparison of a continuous outcome variable among two or more groups using a covariate to increase power. Analysis of covariance controlled for other differences that might exist in the samples that were compared.

To analyze each hypothesis of the research, the means, standard deviations, minimum values, and maximum values of the Comprehensive Test of Basis Skills (CTBS) and number of days present were used. The analyses of covariance were run on the SAS computer program.

A one-way ANCOVA was used to test the first hypothesis to determine the main effect of the dropout prevention treatment on the Comprehensive Test of Basic Skills reading achievement scores using a .05 level of significance. The F value calculated was 7.83, and the probability factor was greater than .0001 which is less than the .05 level of significance. The results of this analysis indicated significant difference ($p < .05$) between the control group ($n=119$) and the experimental group ($n=68$) in CTBS reading achievement scores in 1991-1992. Thus, the hypothesis was rejected. The results of these statistics indicated that participation in a self-contained dropout prevention program did not have an effect on improved reading achievement. Students in the control group made significantly greater gains in reading achievement than the treatment group.

A one-way ANCOVA was used to test the second hypothesis to determine the main effect of the dropout prevention treatment on number of days present at a .05 level of significance. The F value calculated was 8.12 and the probability factor was greater than .0001 which was less than the .05 level of significance. The results of this analysis indicated significant difference ($p < .05$) between the control group ($n=119$) and the experimental group ($n=68$) in school attendance in 1991-1992. Again, the hypothesis was rejected. The results of these statistics indicated that participation in a self-contained dropout prevention program did not have an effect on improved attendance. Students in the control group made significant gains in attendance. The attendance in the treatment group actually decreased.

Conclusions

The results of the one-way ANCOVA for the first hypothesis indicated that participation in a self-contained dropout prevention program did not have an effect on improved reading achievement of at-risk students. Students in the control group made significantly greater gains in reading achievement than the treatment group. This did not support the research reviewed in Chapter 2 which indicated that successful dropout prevention programs improved reading achievement scores.

The results of the one-way ANCOVA for the second hypothesis indicated that participation in a self-contained dropout prevention program did not have an effect on improved attendance of at-risk students. This did not support the research reviewed in Chapter 2 which indicated that successful dropout prevention programs improved attendance. The average attendance for the entire fourth-grade population in Florida was 141.2337 days present in 1992. The average attendance of this district's fourth-grade dropout prevention program participants was 166.1764 days present. Even though this was well above the state average for all fourth-grade students, the attendance of students served in Project START was still less than the attendance of comparable students served in the traditional school program within the district.

This study was conducted after 4 years of implementation. The district had opportunity to revise the curriculum, provide necessary inservice to teachers, and make other programmatic revisions to improve student outcomes. Posttest reading achievement scores and attendance indicated that students served in the self-contained dropout prevention programs were not making the same gains as similar students served in the regular classes.

Students were identified for the program based on a profile which could be interpreted as tracking students. Although this practice has been successful in other districts, this district needs to determine if the practice is appropriate for use with its identified student population. Students in the dropout prevention program were identified, and the parents were notified and had to approve the student's placement in this special program for at-risk students. One could conjecture that because these students knew that they were identified as "at-risk," a self-fulfilling prophecy occurred because the students knew of their special status as "underachievers." Additionally, the district needs to examine the teachers' expectations of the students in their Project START classes. Low teacher expectations about student ability levels can become reality.

The results of this research indicate that the district needs to revisit the implementation of Project START and to determine why students in the program are not making significant gains in reading achievement and in attendance. Since this self-contained model has worked in other districts, it needs to be determined why the program did not work in this district.

It is important to remember that the sample for this study was large. All fourth-grade students who met the reading achievement criteria, who were enrolled in the school for a full year, and who did not receive other special services were used in this study. No Limited English Proficient students or Exceptional Student Education students were selected for the study. Seven percent of the total fourth-grade population was used. Socioeconomic status of the sample was not examined.

It should also be noted that other at-risk factors could have been a priority in the identification of students who were served in Project START. Although disruptive behavior was not a criterion for this program, the identification process could have resulted in students with behavior problems or other problems that interfere with the learning process being identified for Project START. The grouping of problem students could have resulted in lower learning levels if the teachers did not employ appropriate strategies.

Part of the FTE allocated to this program was used to lower class size. In Project START, one could speculate that lower class size did not appear to be a factor in improved reading achievement and attendance.

It appears that there are some key elements of other successful programs that are missing in Project START.

Perhaps there was not a good student/teacher match. Selecting the appropriate teacher is critical to the success of dropout prevention programs. The district should examine the process used at each Project START school to select teachers.

One could suggest that there was not enough emphasis on the basic skills in these dropout prevention programs. The curriculum in the individual program description in the district's approved dropout prevention plan specified emphasis on reading skills. It appears that the whole language approach stressed in Project START was less effective than the traditional basal reader for the students in this study. The district should evaluate the effectiveness of this approach for at-risk students. Perhaps the staff development opportunities were not as consistent as they should have been to ensure that teachers have the skills to effectively focus on reading skills.

The district should reevaluate the staff development opportunities available to dropout prevention teachers. These offerings should include strategies for teaching reading and language arts skills, special education strategies, classroom management, and learning styles of at-risk students. Teachers should be encouraged to participate in the staff development offerings relevant to Project START. It might be helpful if the teachers ascertained student interests and made learning more relevant to the identified population.

Implications for Further Study and Practice

To expand the body of research, studies need to be conducted to determine why the control group did better in the regular class. Additionally, qualitative research on the type, quality, and background of teachers in the district's dropout prevention programs might be helpful. Not all teachers are qualified or have the necessary skills and interests to work with at-risk students successfully .

Other relevant factors that need to be considered in further research include the number of discipline referrals and the rate of promotion to the next grade level. Additionally, different types of dropout prevention programs should be analyzed to determine if there is a positive effect on reading achievement and attendance.

Additional research is needed to determine if this program has been replicated in other districts. If programs are found, student outcomes should be analyzed to determine if they are similar to Project START.

Our students of today are the hope of tomorrow. They are tomorrow's leaders and workforce and must have the knowledge and skills to be successful contributors in our society. Our survival as a democracy is intrinsically bound to the progress of today's children. The progress of today's children is intrinsically bound to successful classroom practices. Education is a process of lifelong learning, and we must be a literate society to be free society. If we, as a society, intend to maintain our democracy as we know it, it is imperative that we, as educators, continually assess and reassess what goes on in our classrooms and to revise programs that are not meeting the needs of our children.

APPENDIX
RAW DATA

Eligible--Not Served

		90/91 Total		91/92 Total	
SCHOOL	FSN	Reading RAWTOT	Days Present	Reading RAWTOT	Days Present
01	2309	37	173	40	174
01	1021	30	170	49	173
01	0113	44	174	71	174
01	0116	44	174	42	174
01	1010	33	170	64	175
01	1901	39	168	33	177
01	1315	45	173	62	173
01	1106	36	176	48	173
01	2144	29	180	39	174
01	0106	31	160	45	170
01	1211	33	150	47	162
01	0819	46	180	61	177
01	0419	34	175	44	171
01	0124	20	178	30	176
01	2218	38	170	54	169
01	1018	48	176	40	180
01	2667	48	165	59	168
01	1904	24	160	29	169
01	7989	33	174	46	172
01	1012	34	170	34	175
01	2304	17	172	26	159
01	0815	41	176	44	176
01	1821	47	170	52	176
01	1825	34	172	48	175
02	1908	37	160	28	166
02	1103	46	180	40	180
02	2511	48	180	41	177
03	3283	42	168	32	173
03	1418	40	162	53	166
03	0216	28	169	37	173
03	1767	33	180	37	178

		90/91 Total		91/92 Total	
SCHOOL	FSN	Reading RAWTOT	Days Present	Reading RAWTOT	Days Present
03	1122	39	165	37	175
03	8672	39	176	44	174
03	1604	41	171	48	175
04	0830	34	179	39	173
03	6487	39	165	49	163
03	2408	47	164	56	171
03	0504	37	169	35	174
03	0052	33	175	32	170
03	0425	46	176	59	164
03	0802	47	173	54	175
03	1407	34	179	21	178
03	3963	32	172	27	177
04	0510	40	180	45	178
04	1001	46	177	28	173
04	0518	31	158	51	173
04	0803	45	178	44	176
04	0117	35	176	49	172
05	2225	35	180	35	178
05	0904	20	177	23	177
05	2608	45	171	59	179
05	1113	41	174	33	174
05	2111	37	174	45	173
05	2121	36	165	35	159
06	0818	27	171	29	177
06	0607	38	179	38	172
06	2406	42	176	36	161
07	8822	17	147	31	163
07	0316	40	173	37	177
07	0505	28	168	29	162
07	2318	45	174	33	174
07	0504	45	180	38	180
07	9840	43	171	39	167
07	1818	40	159	59	160
08	0422	43	166	54	169
08	2618	41	176	51	171
08	1312	36	166	32	165
08	4895	32	169	33	167
08	1719	31	176	27	174
08	2206	40	172	43	170
08	0102	33	175	61	170
09	2520	37	172	41	173
09	0408	42	173	53	168
09	0904	39	174	36	175
09	2013	46	176	53	178

		90/91 Total		91/92 Total	
SCHOOL	FSN	Reading RAWTOT	Days Present	Reading RAWTOT	Days Present
09	0220	23	172	27	167
09	0722	46	180	59	180
10	1801	42	179	62	177
10	1674	27	180	34	180
10	0314	29	180	41	180
10	2569	29	178	25	176
10	1126	43	165	54	168
10	0308	32	167	37	170
10	0202	32	164	37	169
10	1514	37	173	61	176
10	0218	24	116	26	166
11	1518	31	176	28	178
11	7519	39	176	30	174
11	1966	44	175	35	171
12	1222	39	169	43	171
12	1524	43	278	34	174
12	0813	41	164	43	168
12	0306	45	164	53	168
12	1003	41	180	35	159
12	2320	39	174	33	173
12	1813	40	157	37	169
12	0583	26	174	29	166
13	2512	43	174	61	177
13	1402	42	169	44	162
13	7513	42	179	56	154
14	4635	44	163	30	145
14	0315	45	175	51	177
14	2025	42	180	35	177
15	4578	34	179	34	179
15	0608	41	164	61	160
15	1318	37	179	54	176
16	9326	35	180	27	179
16	4928	36	144	30	175
16	2120	43	177	41	178
16	7930	17	155	20	160
16	6662	28	168	30	171
16	6884	29	177	27	170
16	0369	39	178	44	179
17	0423	32	168	37	175
17	0722	27	164	31	138
17	2612	38	177	54	174
17	0117	35	170	46	173
17	0108	30	171	37	164
17	1801	30	172	30	178

Eligible--Served

		90/91 Total		91/92 Total	
SCHOOL	FSN	Reading RAWTOT	Days Present	Reading RAWTOT	Days Present
01	014	16	136	41	166
01	0101	29	157	23	166
01	0409	26	179	27	158
01	0818	37	165	39	174
01	2315	20	175	17	173
02	1907	43	176	42	177
02	0715	35	168	36	168
02	2504	34	167	29	156
02	1101	24	176	22	170
02	0710	41	174	26	174
03	1701	33	163	17	156
03	1603	26	171	60	176
03	6179	29	114	23	155
04	1121	45	157	45	161
04	1515	18	175	24	171
05	1916	44	172	46	171
05	1804	33	178	36	177
05	0510	28	180	41	175
06	9929	34	172	34	170
06	2009	43	177	29	175
06	0507	33	173	38	177
07	1715	36	167	32	163
07	0217	36	131	30	164
07	2013	27	126	22	113
07	1219	15	175	16	179
07	1002	40	162	19	177
08	1314	22	172	21	171
08	2604	41	177	55	174
08	0403	37	176	37	134
08	1724	27	173	21	176
09	2606	28	167	30	138
09	2201	21	175	30	173
09	2225	45	168	50	173
09	1210	43	178	55	180
10	1018	35	180	41	170
10	1119	25	170	22	170
10	6920	36	171	28	167
11	3494	44	165	47	165
11	0926	25	178	30	168
11	6424	46	174	52	179
11	1902	45	170	49	172
11	3183	30	176	35	167

		90/91 Total		91/92 Total	
SCHOOL	FSN	Reading RAWTOT	Days Present	Reading RAWTOT	Days Present
12	2215	18	179	23	180
12	2108	41	172	41	141
12	2410	37	173	44	145
12	1306	45	172	28	169
12	1922	30	179	39	148
12	1224	14	170	26	140
13	1023	36	131	45	165
13	0115	26	94	31	168
13	2522	30	167	26	176
13	0602	43	167	41	175
13	2115	33	180	39	180
13	1816	38	162	48	172
14	4514	35	165	48	177
14	1531	19	142	17	145
14	3765	19	167	37	169
15	2204	46	180	47	168
15	0220	26	172	19	166
16	1827	29	139	19	136
16	2981	47	177	23	174
17	6896	26	179	34	173
17	0508	26	175	24	175
17	0203	17	176	15	174
17	0806	39	176	48	166
17	1806	37	167	46	161
17	2619	27	160	28	165
17	3729	27	168	22	173

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BIOGRAPHICAL SKETCH

Mary G. Bennett was born in Atlanta, Georgia, on December 15, 1946. After graduating from Southwest High School in Atlanta in 1964, she attended the University of Georgia. In 1969, Mrs. Bennett received her Bachelor of Science degree from the University of Chattanooga with a major in secondary education and minors in English and political science. She received her Master of Education Degree in Educational Administration from Stetson University in 1976.

Mrs. Bennett's professional experience includes 15 years as classroom teacher and 9 years as a district level administrator in Volusia County. Currently, she is on loan from the School District of Volusia County to the Florida Department of Education as the Region III Dropout Prevention Coordinator for 10 east-central Florida school districts.

Mrs. Bennett moved to Ormond Beach, Florida, in 1970 where she continues to reside with her husband. She is vice chairman of the Daytona Beach Community College District Board of Trustees and is active in civic and community organizations. She is a member of St. James Episcopal Church in Ormond Beach.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

James W Hensel

James W. Hensel, Chair
Professor of Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

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